

ABSTRACT OF THE DISCLOSURE

Systems and methods to remove a first material located on a top surface of a workpiece are presented according to one aspect of the present invention. According to an exemplary method, the pad including a second material is positioned proximate to the workpiece so that a front surface of the pad contacts an exposed surface of the first material. The front surface of the pad is mechanically moved against the exposed surface of the first material to initiate a chemical reaction between the first material and the second material that yields a reaction product. The reaction product may be removed by using a chemical solution, by using the mechanical movement of the pad against the exposed surface of the first material or both.